

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (canceled)

7. (New): A driver for driving a load by a secondary power supply voltage obtained by stepping up a primary power supply voltage using a charge pump circuit that has a multiplicity of step-up stages each including a switching element and a capacitor, wherein

the first capacitor of the first stage (first-stage capacitor) of said charge pump circuit is energized by the lowest voltage of the voltages impressed on the capacitors of said multiplicity of step-up stages; and

said first-stage capacitor has a better frequency response than that of at least one of said capacitors of the subsequent stages.

8. (New): A driver for driving a load by a secondary power supply voltage obtained by stepping up a first power supply voltage using a charge pump circuit that has a multiplicity of step-up stages each including a switching element and a capacitor, wherein

the first capacitor of the first stage (first-stage capacitor) of said charge pump circuit is energized by the lowest voltage of the voltages impressed on the capacitors of said multiplicity of step-up stages; and

said first-stage capacitor is different in configuration from at least one of said capacitors of the subsequent stages; and

said first-stage capacitor has a smaller internal resistance than any of said capacitors of said subsequent stages.

9. (New): The driver according to claim 8, wherein

said first-stage capacitor has a multiplicity of parallelly connected capacitors each having an area smaller than that of at least one of said capacitors of said

subsequent stages such that the internal resistance of said first-stage capacitor is sufficiently small.

10. (New): The driver according to claim 8, wherein

said first stage capacitor has a multiplicity of equipotential nodes within the region of said capacitor, thereby making said internal resistance sufficiently small.

11. (New): The driver according to claim 8, wherein

said first-stage capacitor and said capacitors of said subsequent stages are MOS capacitors; and

said first-stage capacitor comprises:

a multiplicity of first electrodes formed at multiple locations within one region of a substrate, wherein said multiplicity of first electrodes are interconnected;

insulating layers formed on/above respective substrate regions between neighboring first electrodes, each layer covering at least the respective substrate region; and

a multiplicity of second electrodes formed on/above said respective insulating layers, wherein said multiplicity of second electrodes are interconnected;

wherein said one region is a semiconductor region having a specific conduction type isolated from other regions by isolation regions, and each of said multiplicity of first electrodes has a high conductivity and is formed by increasing the conductivity of said one region, and said insulating layer is an insulating oxide layer;

the number of said first electrodes is equal to or greater than 3; and wherein all said first electrodes have the same conduction type, and all said first electrodes being formed within one region of the same conduction type.

12. (New): The driver according to claim 11, further comprising a first lead wire that interconnects said multiplicity of first electrodes.

13. (New): The driver according to claim 12, further comprising another region of said substrate that electrically interconnects said multiplicity of first electrodes.
14. (New): The driver according to claim 11, further comprising a second lead wire that interconnects said multiplicity of second electrodes.
15. (New): The driver according to claim 14, further comprising additional lead wires wherein each additional lead wire connects to said second lead wire and connects to multiple locations along one of said second electrodes.
16. (New): The driver according to claim 11, further comprising a multiplicity of recessed areas wherein each of said multiplicity of recessed areas is formed within one of said multiplicity of second electrodes.
17. (New): The driver according to claim 16, further comprising a multiplicity of third electrodes wherein each of said multiplicity of third electrodes is formed on one of said multiplicity of recessed areas.
18. (New): The driver according to claim 17, further comprising a third lead wire that connects to at least one of said multiplicity of third electrodes.
19. (New): The driver according to claim 11, wherein the number of said second electrodes is one less than the number of said first electrodes.
20. (New): The driver according to claim 11, wherein said first electrodes and said second electrodes are arranged at approximately regular intervals respectively.
21. (New): The driver according to claim 11, wherein
each of said multiplicity of first electrodes has an elongate rectangular shape extending in parallel with other of said multiplicity of first electrodes; and
each of said multiplicity of second electrodes has an elongate regular shape extending between two of said neighboring first electrodes.